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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,751	09/10/2003	Toshikazu Kobayashi	SCEY 20.609 (100809-00221)	3472
26304	7590	04/19/2006	EXAMINER	
KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585			JONES, CRYSTAL L	
			ART UNIT	PAPER NUMBER
			2627	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/659,751		KOBAYASHI ET AL.	
	Examiner		Art Unit	
	Crystal Jones		2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8 and 10 is/are rejected.
- 7) ☒ Claim(s) 7 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figures 1 and 2 should be designated by a legend such as --Prior Art--because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-4 and 10 are rejected under 35 U.S.C. 102(a) as being anticipated by Fujimoto (U.S. Publication 2002/0159343).

Regarding claim 1, Fujimoto disclose an optical disk reproducing device comprising (Figs. 3 and 10): a motor for rotating an optical disk (Figs. 3 and 10, element 16) having at least either one of a first area (Fig. 16a, area from P0 to P1 or Fig. 16b, recorded part of an information area) and a second area (Fig. 16a, A30 or Fig. 16b, part other than the recorded area); an optical head for receiving a spot light after being reflected on the optical disk (Figs. 3 and 10, element 1); a signal generating section for

generating a comparison reference signal from an output signal of the optical head ([0079] and [0124]); a comparing section for comparing the comparison reference signal with a predetermined threshold value ([0080] and [0125]), and generating a comparison signal containing at least either one of a first signal status (Fig. 4, $\alpha=1$, $\beta=0$ or Fig. 11, $\alpha=1$, $\beta=1$) corresponded to the first area and a second signal status (Fig. 4, $\alpha=0$, $\beta=0$ or Fig. 11, $\alpha=0$, $\beta=0$) corresponded to the second area; and a control section (Figs. 3 and 10, element 6) for observing signal status of the comparison signal at least throughout a duration during which the spot light goes round once on the optical disk (See Figs. 9a and 9c or [0151]), and making a decision, based on the observed result, about in which of the first area and the second area the spot light falls.

Regarding claim 2, Fujimoto discloses the optical disk reproducing device according to claim 1, wherein the control section makes a decision on whether the first signal status was sustained at least throughout a duration during which the spot light went round once on the optical disk, based on the observed result (See Figs. 9a and 9c or [0151]).

Regarding claim 3, Fujimoto discloses the optical disk reproducing device according to claim 1, wherein the control section controls the optical head so as to activate tracking servo ([0084] or [0129]) when the control section detects that the first signal status was sustained at least throughout a duration during which the spot light went round once on the optical disk (See Figs. 9a and 9c or [0151]).

Regarding claim 4, Fujimoto discloses the optical disk reproducing device according to claim 1, further comprising: a spot light moving section (Figs. 3 and 10, element 12) for moving the spot light in a radial direction of the optical disk, wherein the

control section controls the spot light moving section so as to move the spot light by a predetermined distance in the radial direction of the optical disk ([0082] lines 33-35 or [0127] lines 21-35), whenever the second signal status was detected even only once at least throughout a duration during which the spot light went round once on the optical disk (See Figs. 9a and 9c or [0151]).

Regarding claim 10, Fujimoto discloses a method (Figs. 4 and 11) of reproducing an optical disk comprising the steps of: rotating an optical disk (Fig. 4, S203 or Fig. 11, S603) having at least either one of a first area (Fig. 16a, area from P0 to P1 or Fig. 16b, recorded part of an information area) and a second area (Fig. 16a, A30 or Fig. 16b, part other than the recorded area); generating a light reception signal of a spot light reflected by the optical disk after being irradiated therewith (signal generated by element 1 of Figs. 3 and 10); generating a comparison reference signal from the light reception signal (Fig. 4, S207 or Fig. 11, S607); generating a comparison signal containing at least either one of a first signal status corresponded to the first area and a second signal status corresponded to the second area, by comparing the comparison reference signal with a predetermined threshold value (Fig. 4, S210 or Fig. 11, S610); and observing signal status of the comparison signal at least throughout a duration during which the spot light goes round once on the optical disk (See Figs. 9a and 9c or [0151]), and making a decision, based on the observed result, about in which of the first area and the second area the spot light falls (see [0082] or [0127]; decision based on values of α and β).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2627

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto (U.S. Publication 2002/0159343) in view of Toru (JP Publication 10-172147).

Regarding claim 5, Fujimoto discloses the optical disk reproducing device according to claim 4, as anticipated above, wherein the control section performs a series of operations for moving the spot light by the predetermined distance (Fig. 4, S214) by controlling the spot light moving section after initial detection of sustainment of the first signal status at least throughout a duration during which the spot light went round once on the optical disk (See Figs. 9a and 9c), and controls the optical head so as to start the tracking servo ([0084]) only after detection of sustainment of the first signal status in the above operations.

Fujimoto fails to disclose repeating a predetermined number of times the series of operations.

Toru discloses repeating the series of operations a predetermined number of times (Fig. 6, F105-F109; also, pg. 3, line 25 - pg. 4, line 17 of Specification)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Fujimoto with a repetitive operation process to move the spot light.

Motivation for such combination is to find a suitable starting place for data reproduction (Toru [0032]).

Regarding claim 6, Fujimoto discloses the optical disk reproducing device according to claim 2, as anticipated above, but fails to disclose a control section that stores a relative position of the spot light and the optical disk and sets the relative position as an initial position where the next irradiation of the spot light is started.

Toru discloses a control section that stores a relative position of the spot light and the optical disk and sets the relative position as an initial position where the next irradiation of the spot light is started (Pg. 4, lines 3-10 of Specification).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Fujimoto with one in which the relative position of the spot light is preserved.

Motivation for such combination is to prohibit the optical pickup from being too close to a mirror side of an optical disk (Toru [0028]).

Regarding claim 8, Fujimoto discloses the optical disk reproducing device according to claim 1, as anticipated above, but fails to disclose the optical disk reproducing device wherein the signal generating section generates a differential signal of a top-hold signal and a bottom-hold signal of the output signal from the optical head as the comparison reference signal; and the comparing section generates the comparison signal which takes the first signal status when the comparison reference signal exceeded the predetermined threshold value, and takes the second signal status when the comparison reference signal came short of the predetermined threshold value.

Toru discloses the optical disk reproducing device wherein the signal generating section generates a differential signal (Fig. 2, output of element 34) of a top-hold signal (Fig. 2, output of element 32) and a bottom-hold signal (Fig. 2, output of element 33) of

the output signal from the optical head as the comparison reference signal; and the comparing section (Fig. 2, element 36) generates the comparison signal which takes the first signal status when the comparison reference signal exceeded the predetermined threshold value ([0032]), and takes the second signal status when the comparison reference signal came short of the predetermined threshold value ([0027]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Fujimoto with that of Toru to obtain a comparison signal that is representative of disk area.

Motivation for such combination is to obtain a comparison signal and threshold value that can easily identify area of the disk (Toru [0023]).

Allowable Subject Matter

4. Claims 7 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 7, no reference alone or in combination discloses a bottom hold signal of the output signal from the optical head as the comparison reference signal.

Regarding claim 9, no reference alone or in combination discloses generating a predetermined threshold value based on a level within a peak level of the output signal from the optical head when the spot light was irradiated onto a mirror surface on the optical disk.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to

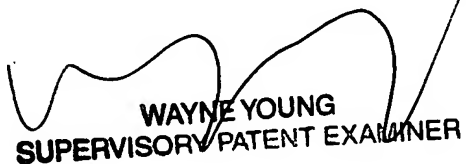
applicant's disclosure. Fujimoto (WO 2001-165550) and Buchler (U.S. Publication 2005/0099900).

Buchler discloses a method and apparatus in which tracks are counted and in which the position of the scanning beam is dependent on the aforementioned count in the case of eccentric optical media but fails to disclose using two comparisons to determine area position.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal Jones whose telephone number is 571-272-2849. The examiner can normally be reached on Monday through Friday, 8:30 a.m. to 6 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


WAYNE YOUNG
SUPERVISORY PATENT EXAMINER